

RYZHMANOV, Yu.M.; YABLOKOV, Yu.V.; KOZYREV, B.M.; STASHKOV, L.I.; MATEVOSYAN,  
R.O.

Superfine structure in electron paramagnetic resonance of some  
derivatives of benzoyl hydrazyl free radicals. Dokl. AN SSSR  
162 no.1:116-119 My '65. (MIRA 18:5)

1. Kazanskiy fiziko-tekhnicheskii institut AN SSSR i Ural'skiy  
politekhnikheskiy institut im. S.M.Kirova. Submitted September 29,  
1964."

RYZHMANTOV, Yu.M.; YABLOKOV, Yu.V.; KOZYREV, B.M.; MATEVOSYAN, R.G.; STASHKOV, I.I.

Electron paramagnetic resonance in biradicals of the hydrazine series. Dokl. AN SSSR 164 no.5:1073-1076 C '65.

(MIRA 18:10)

1. Kazanskiy fiziko-tekhnicheskii institut AN SSSR i Ural'skiy politekhnicheskii institut im. S.M.Kirova. Submitted March 19, 1965.

ACC NR: AP7006066

SOURCE CODE: UR/0366/66/002/009/1644/1646

AUTHOR: Maksimov, A. A.; Matevosyan, R. O.

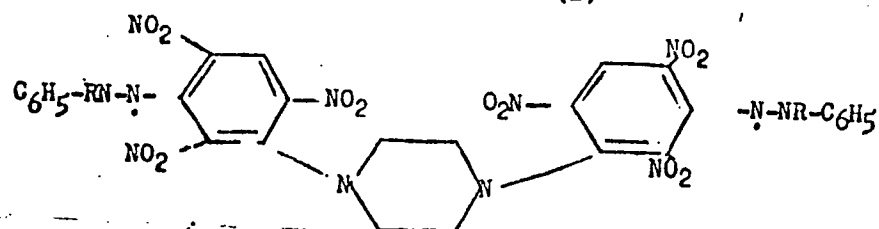
ORG: Institute of Chemistry, Ural Branch, Academy of Sciences USSR (Institut khimii Ural'skogo filiala AN SSSR)

TITLE: Studies in the chemistry of hydrazine series free radicals. XXXIX. N,N'-bis (3-beta-phenyl-beta-n-methoxyphenylhydrazylpicrylyl)-piperazine

SOURCE: Zhurnal organicheskoy khimii, v. 2, no. 9, 1966, 1644-1646

TOPIC TAGS: free radical, hydrazine derivation, organic synthetic process

ABSTRACT: An earlier report by the same authors described the synthesis of the first biradical of the hydrazine series (I)



(I, II) (I)  $R = C_6H_5$ ; (II)  $R = C_6H_4OCH_3$  -n.

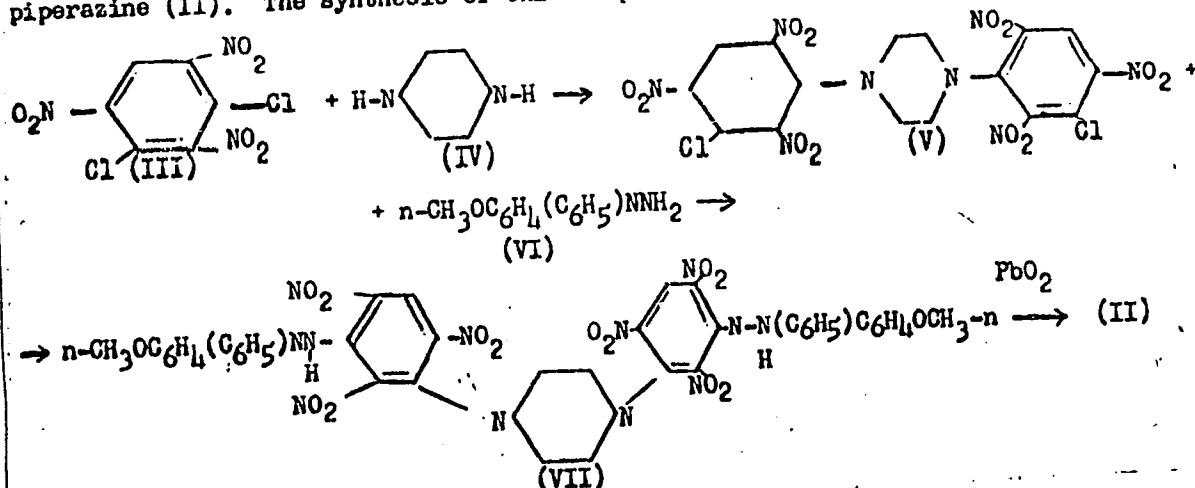
Its characteristic feature is its increased stability relative to diphenylpicrylhydrazine (DPPH).

Card 1/2

UDC: 547.234.78  
09270876

ACC NR: AP7006066

The present report presents the synthesis and a description of several properties of N,N'-bis (3- $\beta$ -phenyl- $\beta$ -n-methoxyphenylhydrazylpicrilyl) piperazine (II). The synthesis of this compound followed this scheme:



Orig. art. has: 1 figure and 2 formulas. [JPRS: 38,970]

SUB CODE: 07

Card 2/2

ACC NR: AP7006067

SOURCE CODE: UR/0366/66/002/009/1646/1649

AUTHOR: Matevosyan, R. O.; Yel'chinov, D. P.

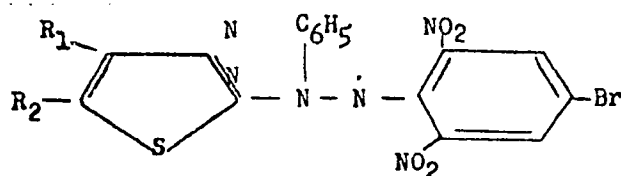
ORG: Ural Polytechnic Institute imeni S. M. Kirov (Ural'skiy politekhnicheskiy institut)

TITLE: Investigations in the chemistry of hydrazine series free radicals. XL. Thiazolylphenyldinitrobromophenyldihydrazyls and their properties

SOURCE: Zhurnal organicheskoy khimii, v. 2, no. 9, 1966, 1646-1649

TOPIC TAGS: free radical, hydrazine derivative, EPR spectrum

ABSTRACT:



(II-IV)

(II)  $R_1 = R_2 = H$ ;

(III)  $R_1 = C_6H_5$ ,  $R_2 = H$ ;

(IV)  $R_1 = R_2 = C_6H_5$ .

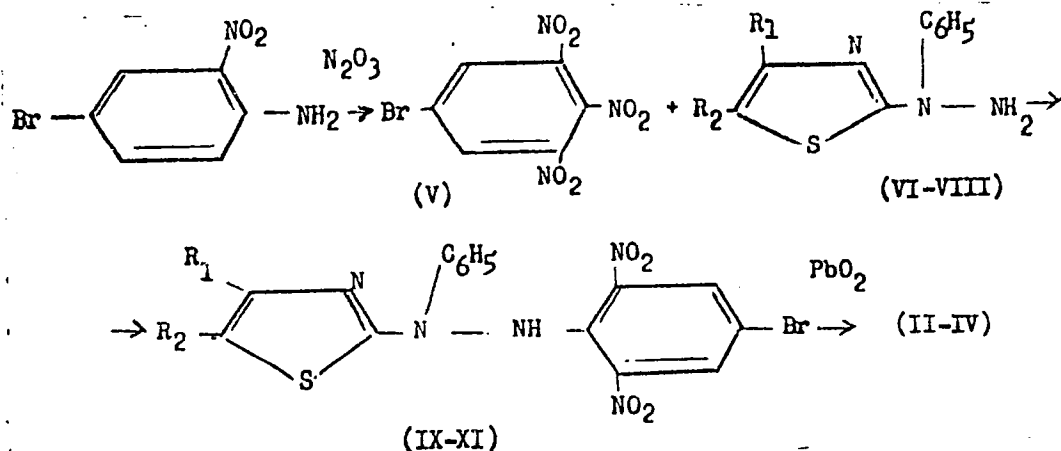
The synthesis of the above hydrazides (II-IV) followed the scheme below:

Card 1/2

UDC: 541.127:541.515

09270878

ACC NR: AP7006067



The hydrazines (IX-XI) are yellowish-orange crystals. Their solutions in chloroform are oxidized with lead dioxide with the formation of deeply orange solutions, exhibiting paramagnetic susceptibility. The ultrafine structure of the electronic paramagnetic resonance spectra consists of four lines. A solution of the hydrazyl (II) has an absorption maximum at 600-610 millimicrons, while the strongly orange solutions of the hydrazyls (III, IV) do not have absorption maxima in the visible region. Orig. art. has: 2 figures and 1 formula. [JPRS: 38,970]

SUB CODE: 07

Card 2/2

ACC NR: AP7012435

SOURCE CODE: UR/0366/66/002/012/2216/2219

AUTHOR: Petrov, L. A.; Matevosyan, R. O.

ORG: Ural Politechnical Institute im. S. M. Kirov (Ural'skiy politehnicheskiy institut)

TITLE: Studies in the chemistry of hydrazine series free radicals. XLI.  
Reactivity of hydrazyl radicals containing benzazol groups at the alpha-nitrogen

SOURCE: Zhurnal organicheskoy khimii, v. 2, no. 12, 1966, 2216-2219

TOPIC TAGS: hydrazine compound, spectrometer, free radical, secondary amine / SF-10 flame spectrometer

SUB CODE: 07

ABSTRACT: In an investigation of the reaction of hydrazyls with secondary amines, the reaction kinetics of alpha-(N-methylbenzimidazolyl-2)-alpha-phenyl-beta-picrylhydrazyl and five other hydrazyl derivatives with carbazol and phenyl-beta-naphthylamine in benzene and dioxane were studied. The SF-10 flame spectrometer was used. It was found that the stability of hydrazyls containing heterocyclic groups depends on the degree of aromaticity of the heterocycles included in the radical, and also on the complexating ability of the substituents both at the alpha- and at the beta-atoms of nitrogen in

UDC: 547.78:541.515

Cord 1/2

0932 1383

ACC NR: AP7012435

hydrazyl radicals. Orig. art. has: 4 figures, 1 formula and 1 table.  
[JPRS: 40,422]

2/2



MATEVOSYAN, R.R.

MATEVOSYAN, R.R., inzh. (MOSKVA).

Designing trapezoid thin plates. Insl. po teor. soorush. no.7:323-  
336 '57. (MIRA 10:9)

(Elastic plates and shells)

PEASE I BOOK EXPLOITATION

SOV/5773

Matevosyan, Rafael' Rubenovich

Ustoychivost' slozhnykh sterzhnevykh sistem; kachestvennaya teoriya (Stability of Compound Framed Structures; Qualitative Theory) Moscow, Gosstroyizdat, 1961. 251 p. (Series: Akademiya stroitel'stva i arkhitektury SSSR. Institut stroitel'nykh konstruksiy. Trudy, vyp. 3). Errata slip inserted. 4000 copies printed.

Sponsoring Agencies: Akademiya stroitel'stva i arkhitektury SSSR. Tsentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruksiy.

Ed. of Publishing House: N. M. Khalafyants; Tech. Ed.: E. M. El'kina.

PURPOSE: This book is intended for scientific workers, aspirants, and design engineers.

COVERAGE: The book deals with the development of methods for the analysis of compound framed structural systems for stability within the elastic range

Card 3/3

Stability of Compound Framed Structures (Cont.)

80V/5773

and with the application of the obtained results to the elastoplastic range under loads applied in the joints. Also discussed is the frequency of natural vibrations of compound structural systems. The theoretical portion of the book is presented in a number of qualitative theorems based on the theory of bifurcation of equilibriums, the theory of quadratic forms, and fundamentals of the theory of the stability of motion. Many times statically indeterminate nonsymmetrical, storied, and trestle-type frames with displaceable and nondisplaceable joints are reviewed. Attention is also given to continuous beams and beams on elastic supports (columns). The author thanks the following for their assistance and advice: Professor I. M. Rabinovich, Doctor of Technical Sciences, Corresponding Member of the ASIA (Academy of Construction and Architecture) USSR; Professor A. F. Smirnov, Doctor of Technical Sciences, Corresponding Member of the ASIA USSR; and Professor V. A. Kiselev, Doctor of Technical Sciences. The manuscript was written at the TsNIIISK of ASIA (Central Scientific Research Institute of Structural Systems of the Academy of Construction and Architecture USSR). There are 65 references: 57 Soviet, 3 English, 3 German, and 2 French.

Card 2/8

MATEVOSYAN, R.R., inzh. (Moskva)

Some propositions of the quantitative theory of vibrations of elastic rod systems with an infinitely great number of degrees of freedom. Issl.po teor.sooruzh. no.11:127-145 '62.

(Elastic rods and wires--Vibration)

(MIRA 15:8)

MATEVOSYAN, R.R. (Moscow)

"The qualitative theory of stability and vibrations of elastic systems".

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 64.

DRIVING, A.Ya., inzh.; MATEVOSYAN, R.R., doktor tekhn. nauk; red.;  
BORODINA, I.S., red.

[Stability of poles with wire guys] Ustroichivost' nacht  
na ottiazhkakh. Moskva, Stroiizdat, 1964. 111 p.  
(MIRA 17:10)

MATEVOSYAN, S. A.

Matevosyan, S. A.: "New design of prosthetic appliances for amputees without hands," (Report), Trudy III Zakavkazsk. s"yezda khirurgov, Yerevan, 1948 (on cover: 1949), p. 529-530

SO: U-5240, 17 Dec. 53, (Letop'is 'zhurnal 'nykh Statoy, No. 25, 1949).

18(7)  
 AUTHORS: Telesnin, R.V., Dmitriyeva, T.V., SOV/155-58-5-35/37  
 Matevosyan, S.A.  
 TITLE: On the Temperature Dependence of the Magnetic Viscosity of  
 Iron and of Some Iron-Nickel Alloys  
 PERIODICAL: Nauchnyye doklady vysshey shkoly. Fiziko-matematicheskkiye  
 nauki, 1958, Nr 5, pp 205-210 (USSR)  
 ABSTRACT: The investigations of magnetic viscosity carried out by R.V.  
 Telesnin, I.A. Lednev and others are continued in the paper.  
 The authors measure the temperature dependence of the magnetic  
 viscosity and of the conductivity of pure iron and of some  
 alloys of iron with silicon and nickel. They use the method  
 given in [Ref 4, 7] (measurement of the timely variation of  
 the electromotive force). The measurements are carried out  
 for temperatures between  $78^{\circ}$  and  $700^{\circ}$  K. The authors state  
 that the measured dependences do not only depend on the  
 chemical composition but also on the geometric measurements  
 of the test pieces. On the other hand the process for  
 Fe-Si-alloys obviously takes a completely other course  
 than for Fe or Fe-Ni-alloys. ✓

Card 1/2



On the Temperature Dependence of the Magnetic  
Viscosity of Iron and of Some Iron-Nickel Alloys

SOV/155-58-5-35/37

There are 6 figures, 1 table, and 7 Soviet references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova  
(Moscow State University imeni M.V. Lomonosov) ✓

SUBMITTED: April 11, 1958

Card 2/2

MATEVOSYAN, SH.M.

37632. O "Parazitonositel'stve" pri malyarii, vyyavlyayemom pytem massovykh obsledovaniy. Trudy In-ta malyarii i med. parazitologii (M-vo zdravookhraneniya arm. SSR), vyp. 4, 1949, S. 24-38.

SO: Letopis' Zhurnal'nykh Statey, Vol. 37, 1949

MATEVOSY'N, SH. M.

37611. protozoynaya fajna kishechnika pri ego pazlichnykh sostoyaniyakn.  
trudy in-ta malyarii i med papazitologii ( m-vo zoravooraneniya  
arm. ssr), vyp 4, 1949 s. 157-67

SO: Letopis' Zhurnal' nykh Statey, Vol. 37, 1949

MATEVOSYAN, SH. M.

37612. mukhi, kak pekenoschiki tsist kishechnykn prosteyshikh. trudy in-ta  
malyarii i med. parazitologin (m-vo zoravookhraneniya arm. ssr.)  
vyp, 4, 1949, s. 204-10

SO: Letopis' Zhurnal' nykh Statey, Vol. 37, 1949

MATEvosyan, Sh M  
GNEZDILov, V.G.

"Parasitology and epidemiology of amebiasis." Sh.M.Matevosian. Reviewed  
by V.G.Gnezdilov. Med.paraz.i paraz.bol. no.2:179-181 Mr-Apr '53.

(MLRA 6:6)

(Amebiasis)

(Matevosian, Sh.M.)

In book "Parasitologiya i epidemiologiya amebyaza," (Aypetrat, Yerevan, 1951) Matevosyan denies the existence of *Entamoeba dispar*. He regards the presence of the tissue form of *E. histolytica* as a certain proof that the disease has been caused by this microorganism and recognizes that *E. histolytica* forma minuta is an essential stage in the development of *E. histolytica*. Matevosyan's suggestion that the name amebic dysentery be discarded and replaced with the name amebiasis must be rejected, but the statement that amebic dysentery never occurs as an epidemic disease is true. Matevosyan's assertion that *E. histolytica* and *E. coli* do not occur simultaneously in the intestine is inaccurate. His opinion that mixed amebic and bacillary dysentery does not occur is also contrary to fact.

MATEVOSIAN, SH.M.

"Communicable diseases in man"; Academy handbook. Reviewed by  
Sh.M.Matevosian. Med.paraz. i paraz.bbl. 26 no.2:228-230

Mr-Ap '57.

(MIRA 10:7)

(PROTOZOA, PATHOGENIC)

MATEVOSYAN, Sh.M.

MATEVOSYAN, Sh.M.

Development and achievements in research and practical work on  
intestinal parasites. Med.paraz. i paraz.bol. 26 no.5:556-562  
S-O '57. (MIRA 11:2)

HELMINTHS,  
research in Russia (Rus))

MATEVOSYAN, SH. M.

"Amoebic Parasite Carriers and the Methods of Fighting Them."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

Yerevan Medical Institute



MATEVOSYAN, Sh.M., prof.

Is pathogenicity a species trait of a micro-organism? Trudy Erev.  
med.inst. no.11:173-177 '60. (MIRA 15:11)

1. Iz kafedry obshchey biologii i parazitologii Yerevanskogo  
meditsinskogo instituta.

(AMEBIASIS) (MICRO-ORGANISMS, PATHOGENIC)

Matevosyan, Ye. M.

Doc Biolog Sci

Dissertation: "Characteristic of the Morphological System of Cestoides  
(Paruterinidae) of Game birds and an Attempt to Establish Their  
Phylogenetic Evolution."

24 June 49

Moscow Veterinary Academy

CO Vecheryaya Moskva  
Sum 71

MATEVOSYAN, Ye. M.

Matevosyan, Ye. M. and Krotov, A. I. "Two new types of Echinocotyle (cestode), from water birds", Trudy Gel'mintol. laboratorii (Akad. nauk SSSR), Vol. II, 1949, p. 96-98.

SO: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

MATEVOSYAN, YE. M.

Kirghizistan - Parasites

Work of the 250th Union Helminthological Expedition of 1945 in Kirghiz S. S. R.  
Trudy Gel'm. lab. no. 5, 1951.

Monthly List of Russian Accessions, Library of Congress, September 1952. UNCLASSIFIED

MATEVOSYAN, YE. M.

(1953) K perostroyke sislenn Tsestal-dilantid, "Works on Helminthology" on the  
75th Birthday of K. I. Skryabin, Izdat. Akad. Nauk, USSR, Moskva, page 101  
All-Union Inst. Helminthology in Acad. K. I. Skryabin

MATEVOSYAN, Ye.M., prof.; OKOROKOV, V.I., kand.biologicheskikh nauk

Neotenic forms of cestodes in water birds of the U. S. S. R.  
Trudy VIGIS 6:121-130 '59. (MIRA 15:5)

(Cestoda)

(Parasitos--Water birds)

(Neoteny)

MATEVOSYAN, Ye.M., prof.; OKOROKOV, V.I., kand. biologicheskikh nauk

Two new species of cestodes from the little grebe, and  
considerations on the genus *Tatria* Kowalewsky, 1900.  
Trudy VIGIS 6:131-138 '59. 15:5)  
(Chernoye, Lake (Chelyabinsk Province)---Cestoda)  
(Parasites---Grebes)

MATEVOSYAN, Ye.M., prof.; PETROCHENKO, V.I., doktor biologicheskikh nauk;  
GARIZMSKAYA, N.N., veterinarnyy vrach

Helminths of fishes in the Volga River and Tsimlyansk  
Reservoir and the investigation of the distribution of  
opisthorchosis and diphylobothriasis in Stalingrad Province.  
Trudy VIGIS 6:144-155 '59. (MIRA 15:5)  
(Volgograd Province: Worms, Intestinal and parasitic)  
(Volga River--Parasites--Fishes)



MATEVOSYAN, Ye.M., prof.

Study of avitellinosis in sheep in the Armenian S.S.R.  
Trudy VIGIS 7:68-74 '59. (MIRA 13:11)  
(Armenia--Sheep--Diseases and pests)  
(Tapeworms)

SHUMAKOVICH, Ye.Ye.; PETROCHENKO, V.I.; MATEVOSYAN, Ye.M.

Scientific and practical assistance rendered to the collective farms  
of Stalingrad Province in organizing measures for the control of  
helminth infestations in farm animals. Trudy Gel'm.lah. 9:398-400 '59.  
(MIRA 13:3)

(Stalingrad Province--Veterinary parasitology)

MATEVOSYAN, Yeranui Matveyevna, doktor biol. nauk; SKRYABIN, K.I., akademik, red.; PETROCHENKO, V.I., red.izd-va; MAKUNI, Ye.V., tekhn. red.; SIMKINA, G.S., tekhn. red.

[Fundamentals of cestodology] Osnovy tsestodologii. Pod red. K.I.Skriabina. Moskva, Izd-vo Akad. nauk SSSR. Vol.3.  
[Dilepidoidea - tapeworm helminths of domestic and wild animals] Dilepidoidea - lentochnye gel'minty domashnikh i dikikh zhivotnykh. 1963. 687 p. (MIRA 16:6)  
(Cestoda) (Veterinary helminthology)

MATEVOSYAN, Ye.M., prof.; SAILOV, D.I., aspirant

*Tatria azerbaijanica* nov. sp., a new cestode from grebes of  
the Kyzyl-Agash State preserve. Izudy VIGIS 10:8-11 '63.  
(MIRA 17:9)

1. Azerbaydzhanskiy pedagogicheskiy institut (for Sailov).

MATVOSYAN, Ye.M.; ARHUSYAN, L.S.

Analysis of the *Raillietina (S.) circumvallata* (Fratte, 1866)  
species and its subspecies (Cestoda: Davaineidae). Izv. V. Am.  
SSR Biol. Nauki 17 no.11:25-30 Nov. 1964 (1964:18:2)

S/133/60/000/009/011/015  
A054/A029

AUTHORS: Kan, Yu.Ye., Matevosyan, Ye. P., Kononov, B.Z.

TITLE: Comparing the Quality of 1X18H9T (1Kh18N9T) <sup>16</sup>Ingots Produced by the Semi-Continuous and by the Conventional Methods

PERIODICAL: Stal', 1960, No. <sup>18</sup>9, pp. 846-849

TEXT: From the ingots produced according to the conventional methods in a basic arc furnace a longitudinal template was made, while from the ingots produced according to the "semi-continuous" method longitudinal and transverse templates were made in various arrangements. As to the macrostructure, no basic difference was found between the two kinds of specimens, in the "semi-continuous" specimens, however, an external approximately 7 mm thick case was observed; furthermore, the crystallites in these specimens had a somewhat smaller cross-section in the transcrystallization zone. The microstructural tests confirmed the assumption of several authors (Ref. 2) that the quantity of  $\alpha$ -phase decreases as the crystallization rate increases. In the border-zone of the "semi-continuous" ingots the inclusions of the  $\alpha$ -phase are smaller and are more evenly distributed over the basic austenite structure than in the conventional ingots. Chemical ana-

Card 1/2

S/133/60/000/009/011/015  
A054/A029

Comparing the Quality of 1X18H9T (1Kh18N9T) Ingots Produced by the Semi-Continuous and by the Conventional Methods

lyses showed that elements such as C, P, Si and S are evenly distributed horizontally and vertically in both kinds of specimens: otherwise, with regard to chemical nonhomogeneity hardly any difference was found between the two types tested. In the case of "semi-continuous" ingots surface defects penetrate somewhat deeper than in the case of the other type. Structure and distribution of non-metallic inclusions were investigated by electrochemical and metallographic methods and it was found that their vertical distribution in the ingots is more uniform in the "semi-continuous" ingots than in the conventional ones, while the distribution of inclusions in the cross-section is more or less the same for both types. Investigation of gas-inclusions in the ingots showed that the distribution of hydrogen and nitrogen is more uniform in the "semi-continuous" ingots than in the conventional ones: the vertical distribution of oxygen is rather uniform in the "semi-continuous" ingots, while this is not the case, for both types, as far as their cross-sections are concerned. There are 6 figures, 2 tables and 3 Soviet references.

ASSOCIATION: TsNIChM and Zavod "Krasnyy Oktyabr'" ("Red October" Plant)

Card 2/2

MATEVOSYAN, Yu.M., prof.; GARIZHSKAYA, N.N., veterinarnyy vrach;  
KUZNETSOV, M.I., kand.veterinarnykh nauk

Helminths of Saiga tatarica. Trudy VIGIS 6:139-143 '59.

(MIRA 15:5)

(Parasites--Kalmyk A.S.S.R.--Saiga)

(Worms, Intestinal and parasitic)





MATEY, I., prof.

Chemistry of acenaphthene. Zhur. VKHO 7 no.3:348-351 '62.  
(MIRA 15:6)  
(Acenaphthene)

MATEY, Maria, mgr.

From the 45th session of the International Labor Conference.  
Praca zabezp spol 3 no.10:24-29 '61.

MATEY, S.

Let us imitate Zbigniew Grek. p. 4.

ROLNIK SPOLKOWY. (Centrala Rolniczej Spolki "Samopomoc Chlopska")  
Warszawa, Poland. Vol. 8, no. 33, Aug. 1955.

Monthly list of East European Accessions (MEA) LC, Vol. 8, no. 1, Feb. 1956

Uncl.

MATEY, S.

The proper people in the proper place. p. 6.

ROLNIK SPOKDZIELCA. (Centrala Rolniczej Spolkzielni "Samopomoc Chlopska")/  
Warszawa, Poland. Vol. 8. no. 42, Oct. 1955.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960

Uncl.

MATEY, S.

Problems of fodder. 1. 5.

(ROLNIK SPOLDZIELCA. Vol. 9 (i.e. 10) no. 16, Apr. 1957, Poland)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

MATEY, S.  
MATEY, S.

It is permissible and necessary to establish free trade in fodder.

p. 8(Rolnik Rolnictwo) Vol. 9 NO. 43, Oct. 1957, Warszawa.

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

MATEY-TYROWICZ, Maria

Codification of the Labor Law. Praca zabezp spol 5 no.5:21-23 My  
'63.



BURLAKU, G.; [Burlacu, G.]; MATEY-VLEDESKU, K. [Matei-Vlădescu, C.]  
APOSTOL, G.; STANCU, S. [Stancu, S.].

Effect of insulin on the energetic exchange and specific  
dynamic action of food at the birds. Rev biol 8 no.2:213-228  
'63.

1. Institut biologiei im. Tr. Sevulescu [Traian Savulescu]  
Akademii RNR, Laboratoriya Fiziologii zhivotnykh.

110-58-5-22/25  
AUTHORS: Mateychenko, V.S., and Namitokov, K.K., Engineers  
TITLE: An Experimental Investigation of the Mechanical Parameters of Fans for Diesel Engine-driven Alternators (Eksperimental'noye issledovaniye mekhanicheskikh parametrov ventilyatorov dizel'nykh generatorov)  
PERIODICAL: Vestnik Elektropromyshlennosti, 1958, Vol 29, Nr 5, pp 68 - 70 (USSR)

ABSTRACT: This article describes experimental determination of the mechanical parameters of fans of different constructions intended for operation under identical conditions in diesel-driven generators. The tests were made on a special vibration rig which imitated the torsional oscillations of the back-plate of the fan relative to the outer rim and also oscillations of particular parts of the fan under conditions corresponding to those arising in service. The vibration rig is described and consists of a motor driving a crank, oscillations from which are applied to the fan back-plate. During the test, the fan rocks to and fro, imitating torsional oscillations in service. The method of determining the tangential displacement of the rim relative to the back-plate by means of an induction probe is described. The measurement of dynamic stresses in fan blades Card1/3 by means of strain gauges is also explained.

110-58-5-22/25

An Experimental Investigation of the Mechanical Parameters of Fans  
for Diesel Engine-driven Alternators

The natural frequencies of fan parts were determined by applying impacts at various points. This set up damped oscillations which were recorded on an oscillograph by means of strain gauges fixed to different parts of the fan. The measurements of frequency are somewhat approximate. Resonance oscillations of different parts of the fan were determined by a piezo-crystal method.

Using the various procedures described, the works has tested different designs of fan for diesel-engine-driven generators. From these experimental investigations, it was possible to evaluate the main mechanical parameters of the fans and to decide suitable constructions. Typical data are given for two different constructions of fan, as sketched in Figure 4. The fans differ only in the number of blades, their shape and arrangement. The test results are tabulated. It is concluded that in one, tangential oscillations are much greater than in the other, and the corresponding stresses are calculated. There were no marked resonance effects in the frequency range observed. The construction of Figure 4B is by far the most rigid.

Card2/3 There are 4 figures and 1 table.

110-58-5-22/25

An Experimental Investigation of the Mechanical Parameters of Fans  
for Diesel Engine-driven Alternators

·ASSOCIATION: Khar'kovskiy elektromekhanicheskiy zavod  
(Kharkov Electro-mechanical Works)

SUBMITTED: May 9, 1957

Card 3/3

MATEYCHENKO, V.S.; MATVIYENKO, V.K.

Increase of the reliability and life of electrical equipment is a problem of the utmost importance confronting the electric equipment industry of the Ukrainian S.S.R. Energ. i elektrotekh. prom. no.4:5-6 O-D '64. (MIRA 18:3)

ACC NR: AP7004812

(A)

SOURCE CODE: UR/0413/67/000/001/0179/0179

INVENTOR: Mateychenko, V. S.; Min'kov, M. S.; Kramarev, V. P.

ORG: none

TITLE: Finite switch. Class 21, No. 152681

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 1, 1967, 179

TOPIC TAGS: electric switch, switching circuit

ABSTRACT: An Author Certificate has been issued for an instant-action finite switch with constant contact pressure. The switch includes two spring-supported bridge-type contacts inserted in the window of the plastic cross piece. During switching the cross piece is moved forward along a guide which is flanged at both ends to insure the setting of extreme positions with the aid of spring-supported latches. To provide momentary switching independent of switching element velocity, the cross-piece includes an additional window in which a switching spring is mounted. During displacement of the driving element this switching spring is set to the position which opens those latches, which shift the crosspiece into extreme position. [CS]

SUB CODE: 09/ SUBM DATE: 1Aug61/

Cord 1/1

UDC: none

MATYCHUK, S.P., inzhener.

Increase the tempo of road construction in the regions developing  
virgin and idle lands. Avt.dor. 17 no.2:4-5 S-0 '54. (MIRA 8:4)  
(Road construction)

MATRYCHUK, S.P.; SMIRNOV, M.F.

Improve the work of demonstration-base road machinery stations and  
disseminate their experience. Avt.dor.19 no.5:4-6 My '56.  
(MLRA 9:8)

(Road machinery)



MATELCHUK, V.

6  
ITP(C)

19 2719  
Total effective neutron cross section of arsenic in the  
range of energy from 0.01 to 0.1 e.v. ~~M. Didenko, V. S.~~  
~~Anastolev, V. Matelchuk, and M. Beslin. Rev. Phys.,~~  
~~Acad. rep. populaire Roumaine 5, 99-102 (1980) (in Russian);~~  
cf. CA 54: 10561c. — Total cross sections of As were detd.  
with a time-of-flight spectrometer with an energy resolution  
of 5.7% at 0.025 e.v. The data were fit by least squares to:  
 $\sigma(b.) = 0.988 E^{-0.4} + 3.75$ , where  $E$  is in e.v. The high-  
energy limit is  $(3.75 \pm 1.08)$  b. J. L. Rosenberg

14

80866

S/055/60/000/03/01/010

16.5600

AUTHOR: ~~Mateyev, A.~~

TITLE: The Geometry of the Vector Field in the Space of Cayley

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya I, matematika, mekhanika, 1960, No. 3, pp. 3-13

TEXT: The author uses the method of S.S.Byushgens (Ref.1) for the investigation of the vector field in a space of Cayley with a constant positive or negative curvature. Since the space is not affine the author replaces the notion of the unit vector by the notion of the "normalized point". The author proves seven theorems, e.g.:  
Theorem: In order that in the elliptic space  $E_3$  or in the hyperbolic space

$H_3$  the field admits a family of orthogonal surfaces it is necessary and sufficient that the sum of the torsions of the asymptotic lines equals zero in every point.

Theorem: The geodesic torsion in every point of an arbitrary line of curvature of the field equals zero.

The other theorems contain necessary and sufficient conditions for the

Card 1/2

The Geometry of the Vector Field in the Space  
of Cayley

80866

S/055/60/000/03/01/010

fact that the asymptotic lines of the field are orthogonal, that a family of surfaces in every point is orthogonal to the vector of the field. Furthermore, the author considers invariants of the field, he computes the curvature of the field and investigates the center of curvature. There are 3 references: 1 Soviet, 1 German and 1 French.

SUBMITTED: June 3, 1959

Card 2/2

4

MATEYEV, A.; STRANDZHEV, A.

Mechanized production line for peeled tomatoes. Kons.i ov.prom.  
18 no.2:38-41 F '63. (MIRA 16:2)

1. Konservnyy kombinat "Pervoye maya", Plovdiv, Bolgariya.  
(Tomatoes, Canned)  
(Assembly-line methods)

1. MATEYEV, A. I., prof.: RASHAP, Ye A., Eng.
2. USSR (600)
4. Bearings (Machinery)
7. Standardizing the consumption of electric power in the production of bearings.  
Podshipnik no. 10. 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

1. MATEYEV, D., Prof.; PARASKOVA, V.; RUSHCHUKLIYEV, I.
  2. USSR (600)
  4. Lactic Acid - Physiological Effect
  7. Respiration and the concentration of lactic acid in the blood during physical activity. Teor i prak. fizkul. 15 No. 9, 1952.
9. Monthly List of Russian Accessions, Library of Congress, \_\_\_\_\_ 1953. Unclassified.

MATEYEV D.

T

COUNTRY : Bulgaria  
CATEGORY : Human and Animal Physiology, The Nervous System

ABST. JOUR. : Period., No. 6 1959, No. 22408

AUTHOR : Svrakov, D.; Kevorkyan, K.; Atanasova, El.:\*

INSTR. : --  
TITLE : An Experimental Study of the Possibility of  
Setting up a Speranskiy Neurodystrophic Process  
in the Periodontium.

ORIG. PUB. : Stomatologiya, 1957, No. 4, 195--207.

ABSTRACT : Sterile glass fragments were placed in the  
dental pulp of 12 dogs, and within 5 to 6 days  
the gradual development of neurodystrophic changes  
was observed in the periodontium of the side  
on which the operation was performed; within 12  
to 15 days they had spread to the opposite side,  
and then to distant organs (eyes, stomach, intes-  
tine, etc.) The neurodystrophic changes, as  
shown by serological investigations, were not  
associated with the presence of leptospirosis.  
The data obtained seem to indicate that reflex

Card:

1/2  
\*Mateyev, D.

T-92

COUNTRY : Bulgaria  
CATEGORY :

T

ABC. JOUR. : RZhBiol., No. 5 1959, No. 22408

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : mechanisms may lie at the basis of the dystrophic changes in the region of the periodontium and permit one to pose the question of the utility of employing novocaine blockade in paradentopathies.--K.S.Ratner

Card: 2/2



BULGARIA / Human and Animal Physiology. Physiology of T  
Work and Sport.

Abs Jour: Ref Zhur-Biol., No 22, 1958, 102325.

Author : Mateyev, Dragomir.

Inst : Not given.

Title : The Physiology of Physical Work and Sport.

Orig Pub: Priroda (Bolg.), 1957, 6, No 2, 24-28.

Abstract: No abstract.

Card 1/1

MATEYEV, D.; GEORGIYEV, V.

Relations between fatigue and type of higher nervous activity (from data of ergographic studies). Fiziol.zhur. 46 no.2:141-147 F '60.  
(MIRA 14:5)

1. From the Georgi Dimitrov Institute of Physical Culture, Sofia.  
(TEMPERAMENT) (FATIGUE)

MATEYEV, D.

Excitation, inhibition, fatigue, and recovery. Fiziol. zhur. 47  
no.9:1171-1177 S '61. (MIRA 14:9)

1. From the G.Dimitrov Higher Institute of Physical Culture, Sofia.  
(NERVOUS SYSTEM)

MATEYEV, D.

On the problem of muscular fatigue. Fiziol. zhur. 47 no.4:504-509  
Ap '61. (MIRA 14:6)

1. From the Dimitrov Higher Institute of Physical Culture, Sofia.  
(FATIGUE) (MUSCLE)

MATEYEV, M. A.

Sentyurin, G. G. General course in technology of silicates; textbook. Moskva, Gos. izd-vo stroit. lit-ry, 1945- (Mic 53-322)

Microfilm AC-100

MATEYEV, N.

Farm Buildings

Savings of a half million rubies. Sel'. stroi. no. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED.

MATYEV, V.I.; RUBINOVICH, A.S.

Penetrating injury of the thorax with a needle. Sov.med. 19  
no.10:88-90 0 '55. (MLRA 8:12)

1. Iz Klinicheskoy ordena Lenina bol'nitsy imeni S.P.Botkina  
(glavnyy vrach--prof. A.N.Shabanov)  
(THORAX, wounds and injuries  
penetrating inj. with pin, surg.)  
(WOUNDS AND INJURIES,  
Thorax, penetrating inj. with pin, surg.)

MATEYEV, Ye.; NIKOL'SKIY, A.S. [translator]; PAVPEROV, V.P. [translator];  
TSUKANOV, V.I. [translator]; SAVOST'YANOV, V.V. [translator]; PU-  
ZIS, G.B. [translator]; STEPANOV, S.M. [translator]; VIKENT'YEV, A.I.,  
red.; OL'SEVICH, Yu.Ya., red.; PRIDANTSEVA, S.V., tekhn. red.

[Labor productivity and the reproduction of the means of produc-  
tion under socialism] Proizvoditel'nost' truda i vosproizvodstvo  
pri sotsializme. Pod red. A.I. Vikent'eva. Predisl. V.S. Nemchinova.  
Moskva, Izd-vo inostr. lit-ry, 1961. 269 p. (MIRA 14:10)

1. *Chlen-korrespondent AN Narodnoy Respubliki Bolgarii* (for Mateyev).  
(Labor productivity) (Economics)



MATEYEV, Yevgeni

Material self-interest and indices of the national economic plan.  
Vop. ekon. no.1:47-57 Ja '61. (MIRA 13:12)

1. Chlen-korrespondent Bolgarskoy AN.  
(Bonus system) (Economic policy)

MATEYEVA, I.I.  
MATEYEVA, I.I.

1. Metal nitrides. II. Silicon and boron subnitrides.  
S. M. Ariya, R. A. Protolova, and I. I. Mateeva. *J. Gen.  
Chem. U.S.S.R.* 25, 609-12 (1955) (Engl. translation). See  
C.A. 49, 12168i.  
II. I. II.

LYUBOMUDROV, V.Ye., kand.med.nauk; BASAMYGINA, L.Ya.; MATEYEVA, K.M.

Periarteritis nodosa in children. *Pediatrics* 38 no.8:76-80  
Ag '60. (MIRA 13:12)

1. Iz otdela profpatologii Donetskogo instituta fiziologii  
truda (dir. - dotsent L.E. Zhislin) i Stalinskoy oblastnoy  
tsentral'noy klinicheskoy bol'nitsy (glavnyy vrach M.I. Asnes).  
(ARTERIES—DISEASES)

LYUBQMUDROV, V. Ye., kand. med. nauk; AGARKOVA, S. V.; D'YAKONENKO, Ye. K.;  
MATEYEVA, K. M.; PAVLOVA, O. A.; SIROTA, G. M.; KYDIS, L. Z.

Combined forms of pneumoconioses in patients with collagenoses.  
Terap. arkh. no.9:95-101 '61. (MIRA 15:2)

1. Iz Stalinskogo nauchno-issledovatel'skogo instituta fiziologii  
truda.

(LUNGS—DUST DISEASES) (COLLAGEN DISEASES)

KAMENETSKIY, S.I., dotsent; LYUBOMUDROV, V.Ye., kand.med.nauk;  
ZHIVOTOVSKAYA, I.A.; MATEYEVA, K.M.

Early diagnosis and treatment of periarteritis nodosa. Vrach.  
delo no.5:34-37 My '62. (MIRA 15:6)

1. Kafedra fakul'tetskoy terapii II (zav. - dotsent S.I.  
Kamenetskiy) Donetskogo meditsinskogo instituta i klinicheskiy  
otdel (ispolnyayushchiy obyazannosti rukovoditelya - kand.med.  
nauk V.Y. Lyubomudrov) Donetskogo nauchno-issledovatel'skogo  
instituta fiziologii truda.

(ARTERIES---DISEASES)

MATEYKIN, F.V.; CHALASHIN, N.N.

Some patterns in the distribution of helminthiases of farm animals in the forest-steppe landscapes; the concept of the epizootiological chain. Zool. zhur. 43 no.7:965-974 '64. (MIRA 17:12)

1. Biological-Pedological Faculty, Moscow State University.

L 06423-67 EWT(1) JK  
ACC NR: AP6029005 (N)

SOURCE CODE: UR/0399/66/000/006/0041/0045

AUTHOR: Sheydova, L.; Alers, I.; Mittermayyer, T.; Sheyda, N.; Mateyka, I.

ORG: Clinic for Infectious Diseases/headed by Dr. T. Mittermayyer/of the Faculty Clinic (Klinika infektsionnykh zabolevaniy Fakul'tetskoy bol'nitsy); Hemodialysis Station at the Department of Internal Disease/headed by Dr. Ya. Mateyka/of the Military Hospital, Koshitse, ChSSR (Gemodializatsionnaya stantsiya pri otdelenii vnutrennikh zabolevaniy Voennoy bol'nitsy)

TITLE: Application of extra-corporeal hemodialysis in hemorrhagic fever accompanied by the renal syndrome

SOURCE: Sovetskaya meditsina, no. 6, 1966, 41-45

TOPIC TAGS: clinical medicine, man, virus disease, medical equipment, diagnostic medicine, epidemiology

ABSTRACT: This is a report on one case occurring in 1963. The patient recovered in 6 months although this disease is usually lethal and has only been diagnosed in autopsy. The patient was hospitalized with an initial diagnosis of Schonlein's purpura. Hemodialysis with added heparin, performed twice for 6 hours at a 2-day interval at the height of renal insufficiency probably saved the patient's life. The course of the disease was complicated by lung edema, requiring tracheostomy, a dry

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UDC: 616.61-002.151-022,6-089:616.61-078

L 06423-67

ACC NR: AP6029005

pericarditis, myocarditis, and later bronchopneumonia and a urinary infection. The diagnosis was based on the clinical syndrome (initial hypotension and characteristic fever curve), laboratory data, the course of the disease and epidemiologic data. Epidemiologic studies on location found favorable conditions for rodents from which many ectoparasites were removed, particularly Hirstionyssus musculi which, according to Soviet literature, can carry the pathologic agent for a long time. Differential diagnosis excluded typhoid fever, leptospirosis, dysentery and sepsis. Thrombocytopenic purpura was excluded on the basis of coagulation time and a higher number of thrombocytes, and immuno-allergic vascular purpura was excluded due to absence of other allergies and certain negative tests. Acute glomerulonephritis was also excluded. Conservative treatment included hypertonic glucose solutions with insulin and calcium, maintenance of water and electrolyte balance, anabolic steroids, cardiotonics, antipyretics, antibiotics, erythrocyte and whole blood transfusions and intensive care. Radical treatment consisted of tracheostomy, draining of the upper respiratory ducts, breathing under pressure, oxygen inhalation and hemodialysis. "We wish to thank Prof. B. L. Ugryumov (Kiev) for consultation in our case. We wish to thank Dr. V. Cherni from the Parasitology Department of the Biologic Institute, Czechoslovakian Academy of Sciences, Prague, for identifying the ectoparasites".

Orig. art. has: 1 figure.

SUB CODE: 06, 07/ SUBM DATE: none/ ORIG REF: 003/ SOV REF: 007/ OTH REF: 008

Card

2/2 *sh*



MATEYKO, A. [Matejko, A.]; MRELA, G.

Participation of volunteers in improving the organization  
of production and labor in Polish enterprises. Sots. trud 8  
no.12:115-118 D '63. (MIRA 17:2)

MATEYKO, M.Ya.

Functions of the main cities of Kis Alföld at various historical stages  
in connection with their geographical location. Uch.zap.MPI vol.  
121:27-55 '59. (MIRA 15:3)  
(Kis Alföld—Cities and towns)

MATEYKO, Ye. I.; SIDOROVICH, S. I.

"Ukrainskiye parodnye motivy v sovremennoy odezhde."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences,  
Moscow, 3-10 Aug 64.

MATEYKO, Z. A.

✓ Complex formation and solid solutions in the diagonal reciprocal system of the molybdates and chlorides of sodium and potassium. G. A. Bukhalova and Z. A. Mateyko (Eng. Construction Inst., Rostov-on-Don). *Zhur. Obshchest. Nauch.* 25, 887-90 (1965).—The system: NaCl-KCl-Na<sub>2</sub>MoO<sub>4</sub>-K<sub>2</sub>MoO<sub>4</sub> was investigated by a visual polythermal method on a Pt plate by means of a Pt-Pt, Pd-Au thermocouple. Two complexes that decompose on melting, Na<sub>2</sub>MoO<sub>4</sub>·K<sub>2</sub>MoO<sub>4</sub> (I) and Na<sub>2</sub>MoO<sub>4</sub>·2K<sub>2</sub>MoO<sub>4</sub> (II), NaCl·Na<sub>2</sub>MoO<sub>4</sub> (III), m. 844° without decompos., and the following invariant points are reported (type, temp., % NaCl, % K<sub>2</sub>MoO<sub>4</sub>, % Na<sub>2</sub>MoO<sub>4</sub>, and phases in equil., resp.): transition, 527°, 41, 53.5, 5.5, KCl, K<sub>2</sub>MoO<sub>4</sub>, II; eutectic, 507°, 42, 47, 11, KCl, II, III; transition, 543°, 30, 35, 25, I, II, III; transition, 560°, 19, 24, 57, Na<sub>2</sub>MoO<sub>4</sub>, I, III; transition, 524°, 49.5, 41.5, 9, NaCl, KCl, III. Phase diagrams of both the complete system and numerous sections are given.

John Howe Scott

MA  
① MAT

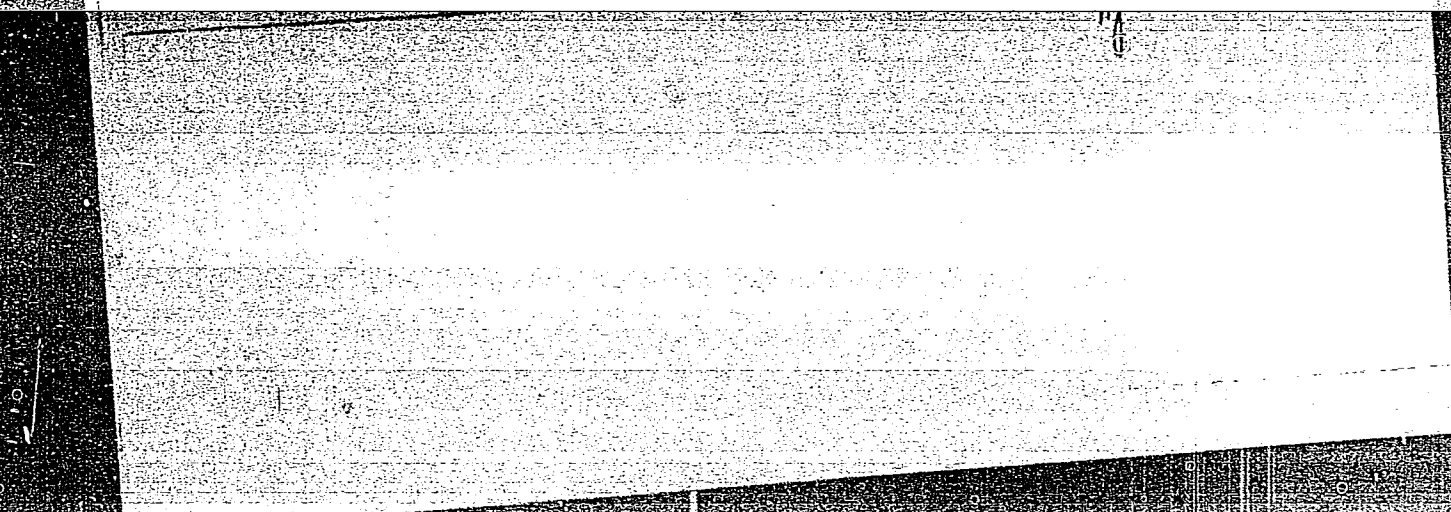
MATEYKO, Z.A.; BUKHALOVA, G.A.

Ternary reciprocal system of sodium and potassium molybdates and  
fluorides. Zhur.ob.khim. 25 no.9:1673-1680 S '55. (MIRA 9:2)

1. Restevskiy inzhenerne-stroitel'nyy institut.  
(Sodium salts) (Potassium salts)

"APPROVED FOR RELEASE: 06/14/2000

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APPROVED FOR RELEASE: 06/14/2000

CIA-RDP86-00513R001032820018-6"

MATEYKO, Z. A.

27 27 7  
Nature of melts of the molybdates and tungstates of  
sodium and potassium. Z. A. Mateyka and G. A. Zhur.  
Soviet Chem. Soc. (Engl. transl.) 1978, 54, 1000-1001.

1-472C



576

AUTHORS: Mateyko, Z.A. and Bukhalova, G.A.  
 TITLE: Complex Formation and Exchange in the Reciprocal System of Sodium and Potassium Fluorides and Tungstates. (Kompleksoobrazovanie i Obmen vo Vzaïmnoy Sisteme iz Ftoridov i Vol'framatov Natriya i Kaliya).  
 PERIODICAL: "Zhurnal Neorganicheskoy Khimii" (Journal of Inorganic Chemistry) Vol. II, No. 2, pp. 407-413. (U.S.S.R.).

ABSTRACT: The aim of this investigation of the system Na, K || F, WO<sub>4</sub> was to find the influence of replacing the molybdate ion by tungstate ion on the stability of the cation and the anion complexes of the system Na, K || F, MoO<sub>4</sub>.  
 The visual-polythermal method was used in the investigation, temperatures being measured with a Pt-Pt, Pd, Au thermocouple. Eight crystallisation fields were found, meeting in six non-variant points, of which three are eutectic. Comparison of data for the system with those for the analogous molybdate system Na, K || F, MoO<sub>4</sub> showed that in the latter the cation complexes are more stable, whereas in the tungstate system the anion complexes are more stable than the cation ones.

There are five references, four of them Russian.

5 figures, 4 tables.  
 The work was carried out at the Engineering Institute, Rostov on Don.  
 Received 14 August, 1956

AUTHORS: Mateyko, Z. A., Bukhalova, G. A. SOV/ 78-3-8-26/48

TITLE: The Ternary Systems  $\text{NaCl}$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$  and  $\text{KCl}$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$   
(Troynyye sistemy  $\text{NaCl}$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$  i  $\text{KCl}$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$ )

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol. 3, Nr 8, pp. 1883-1887 (USSR)

ABSTRACT: The systems  $\text{NaCl}$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$  and  $\text{KCl}$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$  were investigated, especially some solid solutions of these compounds. The melts were investigated by means of the visual-polythermal method. In the system  $\text{NaCl}$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$  the fusion diagram consists of three crystallization ranges:  $\text{NaCl}$ , solid solutions of  $2\text{Na}_2\text{MoO}_4 \cdot \text{Na}_2\text{Cl}_2$  and  $2\text{Na}_2\text{WO}_4 \cdot \text{Na}_2\text{Cl}_2$ , and solid solutions of sodium molybdate and sodium tungstate. The compound  $2\text{Na}_2\text{MoO}_4 \cdot \text{Na}_2\text{Cl}_2$  has its melting point at  $630^\circ\text{C}$ , and the compound  $2\text{Na}_2\text{WO}_4 \cdot \text{Na}_2\text{Cl}_2$  at  $644^\circ\text{C}$ . In the system  $\text{KCl}$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$  only two crystallization ranges exist:  $\text{KCl}$ , as well as continuously solid solutions of potassium tungstate and potassium molybdate. The surface crystal-

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SOV/78-3-8-26/48

The Ternary Systems  $\text{NaCl}$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$  and  $\text{KCl}$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$

lization of the ternary systems investigated:  $\text{NaCl}$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$  and  $\text{KCl}$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$  is comparatively simple; this tends to show the lack of a complex interaction between the components. There are 6 figures, 1 table, and 10 references, 8 of which are Soviet.

ASSOCIATION: Rostovskiy-na-Donu inzhenerno-stroitel'nyy institut (Rostov na Donu  
Institute of Construction Engineering)

SUBMITTED: June 8, 1957

Card 2/2

SOV/78-4-7-31/44

5(2)

AUTHORS:

Mateyko, Z. A., Bukhalova, G. A.

TITLE:

The Ternary Systems of Fluorides, Molybdates, and Tungstates of Sodium and Potassium and the Binary System  $\text{LiF} - \text{Li}_2\text{CrO}_4$   
(Troynnye sistemy iz ftoridov, molibdatov i vol'framatov natriya i kaliya i dvoynnaya sistema  $\text{LiF} - \text{Li}_2\text{CrO}_4$ )

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 7,  
pp 1649-1652 (USSR)

ABSTRACT:

It follows from references 1 and 2 that alkali fluorides form eutectic systems with the corresponding tungstates and molybdates, which have the composition  $\text{Me}_3[\text{EO}_4\text{F}]$  (Me = alkali metal, E = Mo or W). These complexes were also confirmed by X-ray examination. The salts are isomorphous. The following systems were investigated: 1) Na F,  $\text{MoO}_4$ ,  $\text{WO}_4$  (Figs 1,2). The crystallization surface of the system consists of three fields: sodium fluoride, which occupies the largest portion of the surface, continuous solid solutions of the fluoromolybdate- and fluorotungstate complexes and continuous solid solutions of sodium molybdate and - tungstate. 2) K F,  $\text{MoO}_4$ ,  $\text{WO}_4$  (Fig 3) shows the same behavior

Card 1/2

SOV/78-4-7-31/44

The Ternary Systems of Fluorides, Molybdates, and Tungstates of Sodium and Potassium and the Binary System  $\text{LiF} - \text{Li}_2\text{CrO}_4$

as system 1. 3) In the binary system  $\text{Li}_2\text{CrO}_4 - \text{Li}_2\text{F}_2$  (Table 1) an eutecticum is formed at  $460^\circ$  and 14.5%  $\text{Li}_2\text{F}_2$ . Table 2 gives all systems of alkali fluorides with alkali salts of the metals of the 6. group of the type  $\text{H}_2\text{EO}_4$  (E = S, Cr, Mo, W). Lithium forms eutectic systems with all  $\text{Li}_2\text{EO}_4$ -salts. All other alkali metals form the salts  $\text{Me}_3[\text{EO}_4\text{F}]$ . This deviating behavior of lithium is explained by its stronger polarizing effect, which prevents the formation of  $\text{Li}_3[\text{EO}_4\text{F}]$ . There are 3 figures, 2 tables, and 7 references, 5 of which are Soviet.

SUBMITTED: March 4, 1958

Card 2/2

SOV/78-4-1c-25/40

5(2)  
AUTHORS: Mateyko, Z. A., Bukhalova, G. A.

TITLE: Solid Solutions in the Systems 1. Na $\parallel$ SO $_4$ , CrO $_4$ , MoO $_4$ , 2. Na $\parallel$ SO $_4$ , CrO $_4$ , WO $_4$ , 3. Na $\parallel$ SO $_4$ , MoO $_4$ , WO $_4$ , 4. Na $\parallel$ CrO $_4$ , MoO $_4$ , WO $_4$

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 10, pp 2329 - 2334 (USSR)

ABSTRACT: The phase diagrams of six binary systems consisting of the components mentioned in the title are given (Fig 1), as well as the phase diagrams of the ternary systems 1 (Fig 2, Table 1), 2 (Fig 3, Table 2), 3 (Fig 4, Table 3) and 4 (Fig 5, Table 4). The sulphates, chromates, molybdates and tungstates of sodium were found to form with one another a continuous series of solid solutions. This isomorphism and the capability of forming mixed crystals is confirmed by the comparable radii of the anions (Table 5). There are no data available on the polarization properties of the anions, it may, however, be assumed that they are little differing from one other. The intended investigation of the quaternary system Na $\parallel$ SO $_4$ , CrO $_4$ , MoO $_4$ , WO $_4$  is believed to explain the formation of quaternary solid solutions.

Card 1/2

Solid Solutions in the Systems 1. Na  $\parallel$   $\text{SO}_4$ ,  $\text{CrO}_4$ ,  $\text{MoO}_4$ , SOV/78-4-10-25/40  
2. Na  $\parallel$   $\text{SO}_4$ ,  $\text{CrO}_4$ ,  $\text{WO}_4$ , 3. Na  $\parallel$   $\text{SO}_4$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$ , 4. Na  $\parallel$   $\text{CrO}_4$ ,  $\text{MoO}_4$ ,  $\text{WO}_4$

There are 5 figures, 5 tables, and 4 references, 2 of which are Soviet.

SUBMITTED: May 28, 1958

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05848

SOV/78-4-11-1/50

5(2), 5(4)  
AUTHORS:

Bukhalova, G. A., Mateyko, Z. A.

TITLE:

Meltability in the Quaternary System of Sodium Sulphate, Sodium Chromate, Sodium Molybdate and Sodium Tungstate

PERIODICAL:

Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 11, pp 2417-2422 (USSR)

ABSTRACT:

The system under investigation offers the rare example of a quaternary salt system in which all components produce continuous, quaternary, solid solutions from the melt. This phenomenon is explained by the same structure of the anions and the almost equally long ionic radii. Such a system of anions is hardly found again in the periodic system. The presence of quaternary systems of cations with continuous, solid solutions among the salts of platinum metals, lanthanoids and actinides is more likely to be detected. Figure 1 demonstrates the unfolded tetrahedron of the quaternary system with the six edges of the binary systems and the four surfaces of the ternary systems dealt with in reference 2. The authors investigated four sections of the quaternary system whose position is shown in figure 2. The course of the isothermal lines of meltability was

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SOV/78-4-11-1/50

Meltability in the Quaternary System of Sodium Sulphate, Sodium Chromate,  
Sodium Molybdate and Sodium Tungstate

measured (Tables 1,2, Figs 3-6). Experimental data clearly  
indicate that ever-continuous quaternary, solid solutions  
crystallize out of all melts (Fig 7). There are 7 figures,  
2 tables, and 2 Soviet references.

ASSOCIATION: Rostovskiy-na-Donu inzhenerno-stroitel'nyy institut  
(Rostov-na-Donu Institute for Construction Engineers)

SUBMITTED: June 21, 1958

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05877  
SOV/78-4-11-30/50

5(2)  
AUTHORS: Mateyko, Z. A., Bukhalova, G. A.

TITLE: Systems of Potassium Sulphate, -Chromate, -Molybdate and of Potassium Sulphate, -Molybdate, -Tungstate

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 11, pp 2567 - 2570 (USSR)

ABSTRACT: A previous paper dealt with the ternary system of sodium salts of acids of the elements of the 6th group. They formed continuous solid solutions (Ref 1). The potassium salts were now investigated for comparison. Figure 1 shows the corresponding binary systems all of which form continuous solid solutions. Figure 2 and table 1 show that the ternary system  $K_2SO_4$ ,  $MoO_4$ ,  $WO_4$  has a symmetric structure with a straight course of isothermals, and also forms continuous solid solutions. The system  $K_2SO_4$ ,  $MoO_4$ ,  $CrO_4$  (Fig 2, Table 2) also consists of continuous solid solutions. There are 3 figures, 2 tables, and 7 references, 5 of which are Soviet.

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SOV/78-4-11-30/50

Systems of Potassium Sulphate, -Chromate, -Molybdate  
and of Potassium Sulphate, -Molybdate, -Tungstate

ASSOCIATION: Rostovskiy-na-Donu inzhenerno-stroitel'nyy institut (Rostov-  
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BUKHALOVA, G.A.; MATEYKO, Z.A.

Ternary systems of potassium sulfate, chromate, and tungstate,  
and of potassium molybdate, chromate, and tungstate. Zhur.  
neorg.khim. 5 no.5:1132-1134 My '60. (MIRA 13:7)

1. Rostovskiy-na-Doni inzhenerno-stroitel'nyy institut.  
(Systems(Chemistry))